

REMARKS

Reconsideration of the present application is respectfully requested in view of the following remarks. Prior to entry of this response, claims 1-29 were pending in the application, of which claims 1, 10, 13, 17, 20, 23-25, and 28 are independent. In the Office Action dated August 15, 2005, the Examiner allowed claims 1-12, but rejected claims 13-29 under 35 U.S.C. § 112, second paragraph and under 35 U.S.C. § 102(b).

Applicants would like to thank the Examiner for allowing claims 1-12. In response to the Office Action, Applicants have amended claims 13, 16, 17, 19, 24, 25, and 28 to more particularly define the invention. No new subject matter has been added. Support for the amendments to the claims may be found, for example, in Figs. 4 and 5, and at page 18, paragraph 2 to page 21, paragraph 2. Applicants hereby address the Examiner's rejections in turn.

Rejections under 35 U.S.C. § 112, Second Paragraph

The Examiner rejected claims 13-29 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully submit that claims 20-23 and 28 appear to have been rejected under 35 U.S.C. § 112 in error. No grounds were set forth in support of these rejections in the Office Action. Therefore, Applicants respectfully request that the Examiner withdraw the rejections of claims 20-23, and 28 under 35 U.S.C. § 112, second paragraph.

In rejecting independent claims 13, 17, 24, and 25, the Examiner contended that each of these claims are indefinite because "it is not clear how a parameter is detected

based on the prescribed value, which is obtained from a probability without further defining these terms.” Office Action, pages 3-4. In response, Applicants have amended claims 13, 17, 24, and 25 to more particularly define the invention. In particular, claim 13 now recites “storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action pulling the measuring arm away from the support member would become within an allowable range; determining a parameter concerning the posture of the measuring arm; detecting the determined parameter exceeding the stored prescribed value.” In view of these amendments, Applicants submit that amended claim 13 clearly defines a parameter and a stored prescribed value to which the parameter is compared, and is, therefore, definite under 35 U.S.C. § 112, second paragraph. Claims 17, 24, and 25 have been amended to incorporate similar limitations and are, therefore, also definite under 35 U.S.C. § 112, second paragraph. Claims 14-16, 18, 19, 26-27, and 29, each depend from one of claims 13, 17, 24, and 25, and are, therefore, additionally allowable under 35 U.S.C. § 112, second paragraph.

Rejections under 35 U.S.C. § 102 (b)

The Examiner rejected claims 13-29 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,606,539 (*Raab*). Applicants respectfully traverse the Examiner’s rejections and hereby address the rejections of these claims in turn.

Claims 13-16, 26, and 27

With regard to independent claim 13, Applicants submit that *Raab* at least fails to show or suggest (a) “storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action pulling the measuring arm away from the support member would become within an allowable range;” (b) “detecting the determined parameter exceeding the stored prescribed value;” and (c) “warning a user in accordance with a result of the detecting.”

Raab, in its relevant sections, merely refers to a system that includes “an error condition light 166, and six lights 20, one for each of the six transducers.” Col. 8, lines 42 and 43. In the event that “any of the transducers approach its rotational endstop 106 from within 2 degrees, a light and an audible beep for that particular transducer indicates to the user that the user is too close to the end stop.” Col. 8, lines 55-58. Applicants’ disclosure specifically points out the shortcomings of *Raab*’s alert system and states that “a specific posture of the measuring arm, which increases a measurement error, may not be detected by whether or not angles of each joint approach to their respective end stops.” Applicants’ specification, page 6, paragraph 3. In accordance with this recognition, claim 13 provides alert by performing the claimed process of (a) “storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action pulling the measuring arm away from the support member would become within an allowable range;” (b) “detecting the determined parameter exceeding the stored prescribed value;” and (c) “warning a user in accordance with a result of the

detecting.” Through this process, the invention of claim 13 is capable of producing a warning whenever the parameter concerning the posture of the measuring arm exceeds the determined prescribed value regardless of whether an end stop is approached.

Accordingly, Applicants submit that at least because *Raab* fails to show or suggest each and every limitation of claim 13, claim 13 is novel and patentable over *Raab* under 35 U.S.C. § 102(b). Claims 14-16, 26, and 27 depend from claim 13 and are, therefore, also novel and patentable over *Raab* for at least the same reasons.

Claims 17-19 and 29

With regard to independent claim 17, Applicants submit that *Raab* at least fails to show or suggest (a) “storing a prescribed value concerning a posture of the measuring arm, the prescribed value having been determined such that a measurement error due to a user action moving the measuring arm with a change in the force applied to the measuring arm by the counter balance would become within an allowable range;” (b) “detecting the determined parameter exceeding the stored prescribed value;” and (c) “warning a user in accordance with a result of the detecting.”

As mentioned above in connection with claim 13, *Raab*, in its relevant sections, merely refers to providing a light and an audible beep when a particular transducer approaches its rotational endstop from within 2 degrees. Col. 8, lines 55-58. *Raab* fails to show or suggest, in the portions cited by the Examiner or any other portion, the above features (a), (b), and (c) of amended claim 17.

Accordingly, Applicants submit that at least because *Raab* fails to show or suggest each and every limitation of claim 17, claim 17 is novel and patentable over

Raab under 35 U.S.C. § 102(b). Claims 18, 19, and 29 depend from claim 17 and are, therefore, also novel and patentable over *Raab* for at least the same reasons.

Claims 20-22

With regard to independent claim 20, Applicants submit that *Raab* at least fails to show or suggest “a processor configured to input an angle of each joint of the measuring arm into a formula to produce a three-dimension coordinate corresponding to a position of the probe, the formula including a term for correcting an error due to a change of the force generated by the counter balance.”

The Examiner asserts that serial box 16 and host computer 18 of *Raab* perform the calculations carried out by the claimed processor of claim 20. Office Action, pages 7 and 8. Contrary to the Examiner’s assertion, serial box 16 of *Raab* merely receives and processes basic transducer data and responds to the host computer with the desired three-dimensional positional or orientation information. Col. 5, lines 40-45. More specifically, *Raab* generates X, Y, and Z values associated with a measuring arm in an absolute coordinate system based on overall characteristics of the measuring arm and subsequent transducer readings. Col. 11, lines 51-55. Nowhere in *Raab* is it shown or suggested that a term for correcting an error due to a change of the force generated by the counter balance is introduced into the coordinate calculations.

Therefore, Applicants submit that at least because *Raab* fails to show or suggest each and every element of claim 20, claim 20 is novel and patentable over *Raab* under 35 U.S.C. § 102(b). Claims 21 and 22 depend from claim 20 and are, therefore, also novel and patentable over *Raab* at least for the same reasons.

Claims 23-25 and 28

Applicants submit that claims 23-25 include features that correspond to novel features discussed above in connection with claims 20, 13, and 17, respectively. Accordingly, Applicants submit that claims 23-25 are novel and patentable over *Raab* under 35 U.S.C. § 102(b) at least for the same reasons that claims 20, 13, and 17 are novel and patentable over *Raab*.

Applicants additionally submit that claim 28 specifies at least one novel feature that correspond to a novel feature of allowed claim 1. Specifically, claim 28 recites “a determination of a distance of the measuring arm” as a condition for providing a warning. Applicants submit that *Raab* completely fails to show or suggest at least this feature of claim 28. Therefore, Applicant submit claim 28 is novel and patentable over *Raab* under 35 U.S.C. § 102(b).

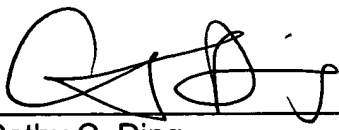
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

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By: 
Cathy C. Ding
Reg. No. 52,820